

Appln No. 10/781,132
Amdt date November 17, 2006
Reply to Office action of August 24, 2006

Amendments to the Drawings:

The attached annotated sheets of drawings include changes to FIGs. 1, 2, 3, 4A, 4B, and 4C. The replacement sheets, which includes FIGs. 1, 2, 3, 4A, and 4C, replaces the original sheets including FIGs. 1, 2, 3, 4A, 4B, and 4C.

Attachment: Replacement Sheets

Annotated Sheets Showing Changes

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REMARKS/ARGUMENTS

Claims 1-20 are currently pending in the application, of which claims 1, 8, 9, 11, 13 and 14 are independent. Claims 8, 9, 14 and 16 have been amended herein. None of the claims is cancelled. Applicant respectfully requests reconsideration and allowance of claims 8-10 and 14-20 in addition to maintaining the allowance of claims 1-7 and 11-13.

I. Amendment to the Drawings

FIGs. 1, 2, 3, 4A, 4B, and 4C herein are amended to add the legend -- Prior Art --.

II. Allowed Claims

Applicant thanks the Examiner for the thorough examination of the application and also for the allowance of claims 1-7 and 11-13.

III. Rejection of Claims 8-10 and 14-20 under 35 U.S.C. § 102(e)

Claims 8-10 and 14-20 were rejected under 35 U.S.C. 102(e) as allegedly being anticipated by Yamamoto et al. (U.S. 2002/0097201).

Claim 8 includes, among other limitations, "determining a start point of each subfield based upon a load ratio of the input video signal." (emphasis added) Applicant does not see the above limitation in Yamamoto et al. (U.S. 2002/0097201). For example, Yamamoto et al. (U.S. 2002/0097201) teaches that "when the length of the rest period varies, the lengths of the first and second rest periods are varied so that the positions of the sustain periods of the two subfields of 24 brightness weight do not change." See paragraph [0062]. In addition, Yamamoto et al teaches "a signal, the period of which is half the length of the frame, is generated from the Vsync signal and this signal controls the start timings of the front and the rear frames. Therefore the start timings of the front frame and rear frame are fixed." See paragraph [0064]. Furthermore, Yamamoto et al teaches "the length of each rest period of the ten subfields is adjusted so that the center position of the sustain period of each subfield is not changed when the length of the rest

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period of the entire frame is varied." See paragraph [0067]. Thus, Yamamoto et al does not appear to teach "determining a start point of each subfield based upon a load ratio of the input video signal." Therefore, it is respectfully requested that rejection to independent claim 8 be withdrawn and that claim 8 be allowed.

Claim 9 includes, among other limitations, "dividing an image of each frame displayed on a PDP corresponding to an input video signal into a plurality of subfields, each subfield corresponding to a bit that represents one of a plurality of luminance weights, the subfields including first and second subfield groups, wherein the second subfield group follows the first subfield group within the same frame, and a number of the subfields included in the second subfield group being greater than a number of the subfields included in the first subfield group." (emphasis added) Yamamoto et al. (U.S. 2002/0097201) does not teach the above limitation. In Yamamoto et al. (U.S. 2002/0097201), a frame consists of a front frame and a rear frame, wherein the front frame contains a number of subfields greater than the number of subfields contained in the rear frame (see FIG. 13A). The front frame in Yamamoto corresponds to the first subfield group and the rear frame in Yamamoto corresponds to the second subfield group. The front and rear frames cannot be swapped without affecting the display results. Therefore, Yamamoto does not teach that the "number of the subfields included in the second subfield group being greater than a number of the subfields included in the first subfield group." In view of the above amendment and for the foregoing reason, it is respectfully requested that the rejection to independent claim 9 be withdrawn and that claim 9 be allowed.

Dependent claim 10 is dependent upon the allowable claim 9, and therefore includes all of the limitations of claim 9 and additional limitations, which together further patentably distinguish claim 10 over the cited references. Accordingly, claim 10 is allowable over the cited reference as being dependent from an allowable independent claim and for the additional limitations it includes therein. In view of the above amendment and for the foregoing reasons, it is respectfully requested that the rejection to claim 10 be withdrawn and that claim 10 be allowed.

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Claim 14 includes, among other limitations, "organizing the subfields into first and second subfield groups of a frame, wherein the second subfield group follows the first subfield group within the same frame, each subfield corresponding to a bit that represents one of a plurality of luminance weights, the second subfield group including subfields corresponding to least significant bit (LSB) and LSB+1, respectively; forming low gray using the subfields corresponding to the LSB and LSB+1 in the second subfield group." (emphasis added) Yamamoto et al. (U.S. 2002/0097201) does not teach the above limitation. In Yamamoto et al. (U.S. 2002/0097201), low gray is formed at the end of the first subfield group (front frame), not at the beginning of the second subfield group (See FIGS. 12A and 13A; paragraphs [0062] and [0064]). Therefore, Yamamoto does not teach "forming low gray using the subfields corresponding to the LSB and LSB+1 in the second subfield group ... wherein the second subfield group follows the first subfield group within the same frame." In view of the above amendment and for the foregoing reason, it is respectfully requested that rejection to independent claim 14 be withdrawn and that claim 14 be allowed.

Dependent claims 15-20 are dependent upon the allowable claim 14, and therefore include all of the limitations of claim 14 and additional limitations therein, which together further patentably distinguish these claims over the cited references. Accordingly, these claims are allowable over the cited reference as being dependent from an allowable independent claim and for the additional limitations they include therein. In view of the above amendment and for the foregoing reasons, it is respectfully requested that rejections to these claims be withdrawn and that these claims be allowed.

The Examiner rejected dependent claim 16 based on Yamamoto et al. (U.S. 2002/0097201). In rejecting claim 16, the Examiner pointed to FIG. 14 in Yamamoto. Applicant respectfully disagrees with the Examiner and submits that Yamamoto et al. (U.S. 2002/0097201) does not teach that "wherein substantially maintaining the periodicity comprises varying a start time of the second subfield group according to a load ratio of the input video signal." As discussed above, Yamamoto et al. (U.S. 2002/0097201) does not teach "varying a start time of the second subfield group according to a load ratio of the input video signal."

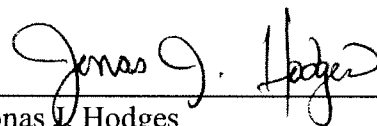
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Therefore, in view of the foregoing reason, it is respectfully requested that rejection to dependent claim 16 be withdrawn and that claim 16 be allowed.

VI. Concluding Remarks

In view of the foregoing amendments and remarks, it is respectfully submitted that this application is now in condition for allowance. Accordingly, Applicant earnestly solicits an early issuance of a notice of allowance with claims 1-20. If there are any remaining issues that can be addressed over the telephone, the Examiner is cordially invited to call Applicant's attorney at the phone number listed below.

Respectfully submitted,
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